The listing of claims is proposed to replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-37. (Canceled)

38. (Currently Amended)   A computer-implemented method for managing resource usage of code downloaded to a computer system, the method comprising:

for each code downloaded to the computer system, associating a resource indicator with all threads that are executed directly by the downloaded code and all threads that are initiated by the downloaded code, wherein all of the threads that are executed directly by the downloaded code and all threads that are initiated by the downloaded code are defined as a set of related code; and

updating the resource indicator when every time that the set of related code changes its actual collective resource usage of a particular resource so that the resource indicator only tracks actual resource usage of the set of related code.

39. (Previously Presented)   A method as recited in claim 38 wherein the resource indicator's amount represents an absolute value of the resource usage.

40. (Previously Presented)   A method as recited in claim 38 wherein the resource indicator's amount represents a proportional value of the resource usage.

41. (Currently Amended)   A method as recited in claim 38 further comprising:

associating the set of related code with each resource portion of the particular resource that is allocated for the set of related code; and

disassociating the <u>set of</u> related code with each resource portion of the particular resource that is deallocated for the <u>set of</u> related code,

wherein the resource indicator is decreased when a resource portion is deallocated and increased when a resource portion is allocated for the <u>set of</u> related code.

42. (Currently Amended) A method as recited in claim 41 further comprising:

allocating the particular resource to the <u>set of</u> related code when the resource indicator is below a maximum predetermined threshold; and

indicating an error and not allocating the particular resource when the resource indicator is above the maximum predetermined threshold.

43. (Previously Presented) A method as recited in claim 42 wherein the error is indicated by throwing an out_of_memory exception.

44. (Currently Amended) A method as recited in claim 41 wherein the <u>set of</u> related code is disassociated through a garbage collection procedure.

45. (Previously Presented) A method as recited in claim 38 wherein the particular resource is selected from a group consisting of memory usage, open file usage, open socket usage, and monitor usage.

46. (Currently Amended) A method as recited in claim 45 wherein the resource indicator indicates a percentage of the particular resource that is utilized by the <u>set of</u> related code.

47. (Currently Amended) A method as recited in claim 45 further comprising:

associating a plurality of thresholds with the particular resource and the <u>set of</u> related

code; and

notifying a registered resource callback when the amount of resource usage of the

particular resource by the <u>set of</u> related code exceeds a first one of the thresholds.

48. (Currently Amended)   A method as recited in claim 47 further comprising notifying a

registered resource callback when the amount of resource usage of the particular resource by the

<u>set of</u> related code drops below a second one of the thresholds that has a different value than the

first threshold.

49. (Currently Amended)   A method as recited in claim 47 further comprising notifying a

registered resource callback when the amount of resource usage of the particular resource by the

<u>set of</u> related code drops below the first threshold.

50. (Previously Presented)   A method as recited in claim 38 wherein the particular resource is

CPU usage or network usage.

51. (Currently Amended)   A method as recited in claim 50 further comprising:

associating a threshold with the particular resource and the <u>set of</u> related code; and

indicating that the <u>set of</u> related code's priority for CPU usage be decreased when the

amount of resource usage of the particular resource by the <u>set of</u> related code exceeds the

threshold.

52. (Currently Amended)   A method as recited in claim 51 further comprising:

associating a second threshold with the particular resource and the <u>set of</u> related code; and

indicating that the <u>set of</u> related code's priority for CPU usage be boosted when the amount of resource usage of the particular resource by <u>set of</u> the related code drops below the second threshold.

53. (Currently Amended)   A method as recited in claim 38 wherein the <u>set of</u> related code is configured to be executed on behalf of an applet in the form of threads.

54. (Currently Amended)   A method as recited in claim 38 further comprising:

associating a plurality of resource indicators with the <u>set of</u> related code that each indicates an amount of resource usage of a plurality of resources by the <u>set of</u> related code; and

updating a selected resource indicator when the <u>set of</u> related code increases or decreases its collective resource usage of the associated resource.

55. (Previously Presented)   A method as recited in claim 54 wherein the resources include memory usage, CPU usage, and network usage.

56. (Previously Presented)   A method as recited in claim 55 wherein the resources further include open file usage and open socket usage.

57. (Previously Presented)   A method as recited in claim 38, further comprising determining which threads are to be defined as the set of related code based on which threads are assigned to a same protection domain.

58. (Currently Amended)   A method as recited in claim 38, further comprising aborting the threads of the <u>set of</u> related code when their resource indicator exceeds a maximum level.

59. (Previously Presented)   A method as recited in claim 38, wherein the computer system is integrated with a set top box or a navigational system.

60. (Currently Amended)   A computer ~~readable medium~~ <u>program product, stored on a machine-readable medium,</u> containing computer code[[s]] for managing resource usage of code downloaded to a computer system, the computer ~~readable medium comprising~~ <u>program product including</u>:

computer code for associating for each code downloaded to the computer system a resource indicator with all threads that are executed directly by the downloaded code and all threads that are initiated by the downloaded code, wherein all of the threads that are executed directly by the downloaded code and all threads that are initiated by the downloaded code are defined as a set of related code; and

computer code for updating the resource indicator ~~when~~ <u>every time that</u> the <u>set of</u> related code changes its actual collective resource usage of a particular resource so that the resource indicator only tracks actual resource usage of the <u>set of</u> related code.

61. (Currently Amended)   A computer readable medium as recited in claim 60 further comprising:

computer code for associating the <u>set of</u> related code with each resource portion of the particular resource that is allocated for the <u>set of</u> related code; and

computer code for disassociating the <u>set of</u> related code with each resource portion of the particular resource that is deallocated for the <u>set of</u> related code,

wherein the resource indicator is decreased when a resource portion is deallocated and increased when a resource portion is allocated for the set of related code.

62. (Currently Amended)   A computer readable medium as recited in claim 61 further comprising:

      computer code for allocating the particular resource to the set of related code when the resource indicator is below a maximum predetermined threshold; and

      computer code for indicating an error and not allocating the particular resource when the resource indicator is above the maximum predetermined threshold.

63. (Previously Presented)   A computer readable medium as recited in claim 60 wherein the particular resource is selected from a group consisting of memory, open files, open sockets, and monitors.

64. (Currently Amended)   A computer readable medium as recited in claim 63 further comprising:

      computer code for associating a plurality of thresholds with the particular resource and the set of related code; and

      computer code for notifying a registered resource callback when the amount of resource usage of the particular resource by the set of related code exceeds a first one of the thresholds.

65. (Currently Amended)   A computer readable medium as recited in claim 63 further comprising computer code for notifying a registered resource callback when the amount of resource usage of the particular resource by the set of related code drops below a second one of the thresholds that has a different value than the first threshold.

66. (Previously Presented)   A computer readable medium as recited in claim 60 wherein the particular resource is CPU usage or network usage.

67. (Currently Amended)   A computer readable medium as recited in claim 66 further comprising:

computer code for associating a threshold with the particular resource and the <u>set of</u> related code; and

computer code for indicating that the <u>set of</u> related code's priority for CPU usage be decreased when the amount of resource usage of the particular resource by the <u>set of</u> related code exceeds the threshold.

68. (Currently Amended)   A computer readable medium as recited in claim 67 further comprising:

computer code for associating a second threshold with the particular resource and the <u>set of</u> related code; and

computer code for indicating that the <u>set of</u> related code's priority for CPU usage be boosted when the amount of resource usage of the particular resource by the <u>set of</u> related code drops below the second threshold.

69. (Currently Amended)   A computer readable medium as recited in claim 60   wherein the <u>set of</u> related code is configured to be executed on behalf of an applet in the form of threads.

70. (Previously Presented)   A computer readable medium as recited in claim 60, further comprising computer code for determining which threads are to be defined as the set of related code based on which threads are assigned to a same protection domain.

71. (Currently Amended)   A computer readable medium as recited in claim 60, further comprising computer code for aborting the threads of the set of related code when their resource indicator exceeds a maximum level.

72. (Previously Presented)   A computer readable medium as recited in claim 60, wherein the computer system is integrated with a set top box or a navigational system.